UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/870,423	05/30/2001	Heinz Lehner	127.007	7083

7590 09/11/2003

BOYLE FREDRICKSON NEWHOLM
STEIN & GRATZ SC
Suite 1030
250 East Wisconsin Avenue
Milwaukee, WI 53202

EXAMINER	
ZIMMERMAN, GLENN	
ART UNIT	PAPER NUMBER
2879	

DATE MAILED: 09/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/870,423	LEHNER, HEINZ	
	Examiner	Art Unit	
	Glenn Zimmerman	2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 March 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,5-13 and 16-21* is/are rejected.

7)☒ Claim(s) *3,4,14 and 15* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *5* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Response to Amendment

Amendment, filed on March 31, 2003, has been entered and acknowledged by the examiner.

Allowable Subject Matter

The indicated allowability of claims 1, 2, 5-9 are withdrawn in view of the newly discovered reference(s) to Shimada Japanese Patent Application Publication 10188846, Opresko U.S. Patent 4,898,746 and Fendley U.S. Patent 4,728,854. Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 5-8, 10-13 and 16-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Shimada Japanese Patent Application Publication 10188846.

Regarding claim 1, Shimada discloses a multipole unit **(paragraph 14)** for a color picture tube comprising:

A support tube **(cylinder like electrode holder Drawing 1 ref. 11)**, a retaining ring **(lock ring ref. 10)** and at least one magnetic ring **(ref. 6, 7 or 8 pole magnets; paragraph 3),**

Wherein the at least one magnetic ring is attached to the support tube **(Drawing 1)**, and a spring element **(spring section ref. 10a)** is provided between **(Drawing 6; paragraph 15)** the retaining ring and a stop **(paragraph 3 stopped by the cylinder like electrode holder; paragraph 14 thrusting the spring formula lock ring 10 into the cylinder-like electrode holder 11)** on the outer circumference of the support tube, and wherein the spring element acts in axial direction **(Drawing 1; paragraph 24 The spring formula lock ring 10 is thrust after an adjustment end, it binds tight and fixes in the direction of a tube axis**) and is integrated in the stop or the retaining ring **(Drawing 5 shows integration)**.

Regarding claim 2, Shimada discloses a multipole unit according to claim 1, wherein the spring element comprises at least one spring leg **(spring section ref. 10a)** which is formed by an opening in the material of the **(drawing 5 no ref. #)** retaining ring or the stop and which is provided with an axial extension **(drawing 6 ref. 10a)** of a portion of axially bent material at the free end thereof.

Regarding claim 5, Shimada discloses a multipole unit according to claim 1, wherein the spring element comprises at least two spring legs which are uniformly distributed **(drawing 5 ref. 10a)** over the circumference of the support tube.

Regarding claim 6, Shimada discloses a multipole unit according to claim 2, wherein the spring element comprises at least two spring legs which are uniformly distributed **(drawing 5 ref. 10a)** over the circumference of the support tube.

Regarding claim 7, Shimada discloses a multipole unit according to claim 1, wherein the support tube has a thread provided thereon **(paragraphs 15 and 18 bolting/screwing; patent abstract in English solution section mentions "the screwing a spring type lock ring 10; paragraph 14)**, the thread being engaged by the retaining ring which is implemented as a threaded ring **(paragraphs 15 and 18 bolting; patent abstract in English solution section mentions "the screwing a spring type lock ring 10; paragraph 14)**.

Regarding claim 8, Shimada discloses a color picture tube **(paragraph 1; paragraph 23; drawing 4)** provided with a multipole unit according to claim 1.

Regarding claim 10, Shimada discloses a multipole unit according to claim 1, wherein the spring element comprises four legs which are uniformly distributed **(Drawing 5 ref. 10a)** over the circumference of the support tube.

Regarding claim 11, Shimada discloses a multipole unit according to claim 2, wherein the spring element comprises four legs which are uniformly distributed **(Drawing 5 ref. 10a)** over the circumference of the support tube.

Regarding claim 12, Shimada discloses a multipole unit **(paragraph 14)** for a color picture tube comprising: a support tube **(cylinder like electrode holder drawing 1 ref. 11)** having a stop **(paragraph 3 stopped by the cylinder lik electrode hold r;**

paragraph 14 thrusting the spring formula lock ring 10 into the cylinder-lik electrode holder 11) on an outer circumference thereof,

A retaining ring **(lock ring ref. 10)**,

A spring element **(spring section ref. 10a)**, and

At least one magnetic ring **(pole magnets ref. 6, 7 or 8; paragraph 3)**, wherein the at least one magnetic ring is attached to the support tube **(drawing 1)**, and the spring element **(spring section drawing 6 ref. 10a)** is provided between the retaining ring and the stop on the outer circumference of the support tube, and wherein

The spring element acts in axial direction **(Drawing 1; paragraph 24 The spring formula lock ring 10 is thrust after an adjustment end, it binds tight and fixes in the direction of a tube axis**) and is integrated **(Drawing 5 ref. 10 and 10a)** in one of the stop and the retaining rings.

Regarding claim 13, Shimada discloses a multipole unit according to claim 12, wherein the spring element comprises at least one spring leg **(drawings 5 and 6 spring section ref. 10a)** which is formed by an opening **(drawing 5)** in the material of one of the retaining ring and the stop and which is provided with one of an axial extension **(drawing 6)** and a portion of axially bent **(drawing 6)** material at a free end thereof.

Regarding claim 16, Shimada discloses a multipole unit according to claim 12, wherein the spring element comprises at least two spring legs which are uniformly distributed **(drawing 5 ref. 10a)** over the outer circumference of the support tube.

Regarding claim 17, Shimada discloses a multipole unit according to claim 13, wherein the spring element comprises at least two spring legs which are uniformly distributed **(drawing 5 ref. 10a)** over the outer circumference of the support tubes.

Regarding claim 18, Shimada discloses a multipole unit according to claim 12, wherein the retaining ring comprises a threaded retaining ring **(paragraphs 15 and 18 bolting; patent abstract in English solution section mentions "the screwing a spring type lock ring 10; paragraph 14)**, and wherein the support tube has a thread provided thereon **(paragraphs 15 and 18 bolting; patent abstract in English solution section mentions "the screwing a spring type lock ring 10; paragraph 14)**, the thread being engaged by the threaded retaining ring.

Regarding claim 19, Shimada discloses a color picture tube **(paragraph 1 and 23 and drawing 4)** comprising a multipole **(paragraph 14)** unit that includes:

A support tube **(cylinder like electrode holder drawing 1 ref. 11)** having a stop on its outer circumference **(paragraph 3 stopped by the cylinder like electrode holder; paragraph 14 thrusting the spring formula lock ring 10 into the cylinder-like electrode holder 11),**

A retaining ring **(lock ring ref. 10)**,

A spring element **(spring section ref. 10a)**, and

At least one magnetic ring **(ref. 6, 7, or 8 pole magnets; paragraph 3)**, wherein the at least one magnetic ring is attached to the support tube **(drawing 4; paragraph 3)**, and the spring element is provided between **(drawing 6; drawing 1)** the retaining ring and the stop on the outer circumference of the support tube, and

Wherein the spring element acts in axial direction **(drawing 1; paragraph 24 the spring formula lock ring 10 is thrust after an adjustment end, it binds tight and fixes in the direction of a tube axis)** and is integrated **(drawing 5 shows integration in the retaining ring)** in one of the stop and the retaining ring.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shimada Japanese Patent Application Publication 10188846 in view of Opresko U.S. Patent 4,898,746.

Regarding claim 9, Shimada teaches all the limitations of claim 9, but fails to teach a color television set or a color monitor with a color picture tube. Opresko in the analogous art teaches a color television set **(col. 1 lines 14-16)**. Additionally, Opresko teaches incorporation of such a color television set to improve the usefulness of a color picture tube and to provide images **(col. 1 lines 14-20)**.

Consequently it would have been obvious to a person having ordinary skill in the art at the time the invention was made to use a color television set in the color picture

tube of Shimada since such a modification would improve the usefulness of a color picture tube and to provide images as taught by Opresko.

Claims 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimada Japanese Patent Application Publication 10188846 in view of Fendley U.S. Patent 4,728,854.

Regarding claim 20, Shimada teaches a color picture tube **(paragraph 1 and 23 and drawing 4)** including a multipole **(paragraph 14)** unit that includes:

A support tube **(cylinder like electrode holder drawing 1 ref. 11)** having a stop on its outer circumference **(paragraph 3 stopped by the cylinder like electrode holder)**,

A retaining ring **(lock ring ref. 10)**,

A spring element **(spring section ref. 10a)**, and

At least one magnetic ring **(ref. 6, 7, or 8 pole magnets; paragraph 3)**, wherein the at least one magnetic ring is attached to the support tube **(drawing 4)**, and the spring element is provided between **(drawing 6; drawing 1)** the retaining ring and the stop on the outer circumference of the support tube, and

Wherein the spring element acts in axial direction **(drawing 1; paragraph 24 the spring formula lock ring 10 is thrust after an adjustment end, it binds tight and fixes in the direction of a tube axis)** and is integrated **(drawing 5 shows integration in the retaining ring)** in one of the stop and the retaining ring, but fails to teach a color television set. Fendley in the analogous art teaches a color television set **(col. 1 lin s 19-20)**. Additionally, Fendley teaches incorporation of such a color television set to

improve the usefulness of color picture tubes as it is one of the many various types of color picture tube uses **(col. 1 lines 15-21)**.

Consequently it would have been obvious to a person having ordinary skill in the art at the time the invention was made to use a color television set in the color picture tube of Shimada since such a modification would improve the usefulness of color picture tubes as it is one of the many various types of color picture tube uses as taught by Fendley.

Regarding claim 21, Shimada teaches a color picture tube **(paragraph 1 and 23 and drawing 4)** including a multipole **(paragraph 14)** unit that includes:

A support tube **(cylinder like electrode holder drawing 1 ref. 11)** having a stop on its outer circumference **(paragraph 3 stopped by the cylinder like electrode holder)**,

A retaining ring **(lock ring ref. 10)**,

A spring element **(spring section ref. 10a)**, and

At least one magnetic ring **(ref. 6, 7, or 8 pole magnets; paragraph 3)**, wherein the at least one magnetic ring is attached to the support tube **(drawing 4)**, and the spring element is provided between **(drawing 6; drawing 1)** the retaining ring and the stop on the outer circumference of the support tube, and

Wherein the spring element acts in axial direction **(drawing 1; paragraph 24 the spring formula lock ring 10 is thrust after an adjustment end, it binds tight and fixes in the direction of a tube axis)** and is integrated **(drawing 5 shows integration in the retaining ring)** in one of the stop and the retaining ring., but fails to teach a color

monitor. Fendley in the analogous art teaches a color monitor **(col. 1 line 21)**. Additionally, Fendley teaches incorporation of such a color monitor to improve the usefulness of color picture tubes as it is one of the many various types of color picture tube uses **(col. 1 lines 15-21)**.

Consequently it would have been obvious to a person having ordinary skill in the art at the time the invention was made to use a color monitor in the color picture tube of Shimada since such a modification would improve the usefulness of color picture tubes as it is one of the many various types of color picture tube uses as taught by Fendley.

Allowable Subject Matter

Claims 3, 4, 14 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 3, the following is an examiner's statement of reasons for allowance: The prior art of record neither shows nor suggests a multipole unit including the combination of all the limitations as set forth in claim 3, and specifically "the spring leg outwardly protruding projection is arranged radially on the retaining ring" could not be found elsewhere in prior art.

Regarding claim 4, the following is an examiner's statement of reasons for allowance: The prior art of record neither shows nor suggests a multipole unit including the combination of all the limitations as set forth in claim 4, and specifically "wherein the

spring leg protruding projections are arranged radially in the retaining ring." could not be found elsewhere in prior art.

Regarding claim 14, the following is an examiner's statement of reasons for allowance: The prior art of record neither shows nor suggests a multipole unit including the combination of all the limitations as set forth in claim 14, and specifically "the spring leg outwardly protruding projection is arranged radially on the retaining ring" could not be found elsewhere in prior art.

Regarding claim 15, the following is an examiner's statement of reasons for allowance: The prior art of record neither shows nor suggests a multipole unit including the combination of all the limitations as set forth in claim 15, and specifically "wherein the spring leg protruding projections are arranged radially in the retaining ring." could not be found elsewhere in prior art.

Conclusion

Japanese to English translations of Japanese Patent Publications can be done at the following website http://www19.ipdl.jpo.go.jp/PA1/cgi-bin/PA1INDEX.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glenn Zimmerman whose telephone number is (703) 308-8991. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (703) 305-4794. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is n/a.

Glenn D. Zimmerman
8/29/03

NIMESHKUMAR D. PATEL
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800